

## CLAIMS

What is claimed is:

1. A system for an ADSL access network for providing ADSL provision flow control at a DSLAM switch, comprising:
  - an element management system in communication with a DSLAM switch; and
  - a network management system in communication with the element management system, the network management system including a control algorithm for controlling ADSL provision flow on a DSLAM switch by introducing a two level semaphore including a first semaphore and a second semaphore;
    - wherein the first semaphore controls a first provision request flow at the element management system level and the second semaphore controls a second provision request flow at the DSLAM switch level.
2. The system according to claim 1, further comprising a semaphore count register in communication with the control algorithm.
3. The system according to claim 1, further comprising a plurality of DSLAM switches in communication with the element management system.
4. The system according to claim 1, further comprising a first object defined by the network management system for representing that a GUI operator is requesting activity on the DSLAM switch.
5. The system according to claim 1, further comprising a second object defined by the network management system for representing that a batch process is requesting activity on the DSLAM switch.

6. A system for an ADSL access network for providing ADSL provision flow control at a DSLAM switch, comprising:
- means for multiplexing an ADSL subscriber line;
  - means for managing an ADSL access network element in communication with the means for multiplexing; and
  - means for managing the ADSL access network in communication with the means for managing the ADSL access network element, the means for managing the ADSL access network including a means for controlling ADSL provision flow on a DSLAM switch by introducing a two level semaphore including a first semaphore and a second semaphore;
  - wherein the first semaphore controls a first provision request flow at the means for managing the ADSL network element level and the second semaphore controls a second provision request flow at the means for multiplexing level.
7. The system according to claim 6, further comprising means for tracking a semaphore in communication with the control algorithm.
8. The system according to claim 6, further comprising a plurality of means for multiplexing an ADSL subscriber line in communication with the means for managing an ADSL access network element.
9. The system according to claim 6, further comprising a first object whose attribute is defined by the means for managing the ADSL access network for representing that a GUI operator is requesting activity on the means for multiplexing the ADSL subscriber line.

10. The system according to claim 6, further comprising a second object whose attribute is defined by the network management system for representing that a batch process is requesting activity on the DSLAM switch.

11. A method of providing ADSL provision flow control at a DSLAM switch, comprising:

at a DSLAM switch, receiving a provision request from a network management system;  
determining whether a DSLAM level semaphore is available at the DSLAM switch;  
determining whether an element management system level semaphore is available; and  
connecting the network management system to the DSLAM switch.

12. The method according to claim 11, further comprising delaying when the DSLAM level semaphore is not available.

13. The method according to claim 12, wherein delaying comprises delaying for about 10-15 seconds, and the delaying is different between a GUI order and a batch order.

14. The method according to claim 11, further comprising determining whether a connection is being configured on a corresponding DSLAM switch when the DSLAM level semaphore is available at the DSLAM switch.

15. The method according to claim 14, further comprising locking the DSLAM level semaphore to the DSLAM switch when a connection is being configured on the DSLAM.

16. The method according to claim 14, further comprising blocking other connection requests on the DSLAM switch when a connection request is being configured on the DSLAM switch.

17. The method according to claim 11, further comprising releasing the DSLAM level semaphore when the element management system semaphore is not available.

18. The method according to claim 17, further comprising delaying after releasing the DSLAM level semaphore.

19. The method according to claim 18, wherein delaying comprises delaying for about 10-15 seconds.

20. A method of providing ADSL provision flow control at a DSLAM switch, comprising:

determining whether a provision request for a DSLAM switch was issued by a GUI operator; and

resetting an attribute associated with the provision request made by the GUI operator.

21. The method according to claim 20, wherein resetting an attribute comprises resetting an object associated with the provision request made by the GUI operator.

22. The method according to claim 20, wherein determining whether a provision request was issued by a GUI operator comprises determining whether a GUI request flag is set.

23. The method according to claim 20, further comprising determining whether there is a batch process provision request when there is no provision request for a DSLAM switch issued by the GUI operator.

24. The method according to claim 23, wherein determining whether a provision request was issued by a batch process comprises determining whether a batch request flag is set.

25. The method according to claim 20, further comprising determining whether a batch provision request acquired a semaphore.

26. The method according to claim 25, further comprising processing the batch provision request.

27. The method according to claim 25, further comprising delaying for a predetermined period when the batch provision request does not acquire the semaphore.